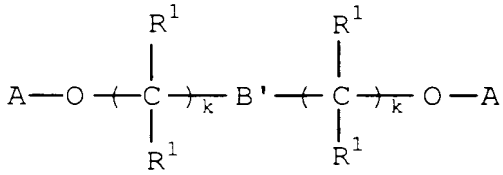
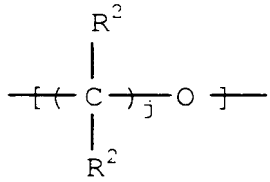
CLAIMS

1. An ABA type block copolymer, which comprises polyacetal segments (A) and a hydrogenated polybutadiene segment (B) hydroxyalkylated at both ends, represented by the following formula (1):



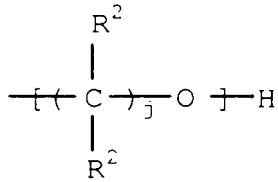
(1)

[where A comprises 95-99.9 mol.% of oxymethylene units and 0.1-5 mol.% of oxyalkylene units represented by the following formula (2):



(2)

(where R^2 is independently selected from the group consisting of hydrogen, an alkyl group, a substituted alkyl group, an aryl group and a substituted aryl group, and j is an integer selected from 2 to 6), and the terminal groups are polyacetal copolymer residues having a structure represented by the following formula (3):

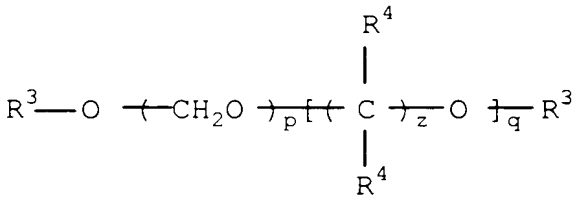


(3)

(where R^2 and j have the same meanings as defined above), B' is a hydrogenated polybutadiene having an iodine value of 20 g - I_2/100 g or less and containing 70-98 mol.% of 1,2-bonds and 2-30 mol.% of 1,4-bonds, R^1 is independently selected from the group consisting of hydrogen, an alkyl group, a substituted alkyl group, an aryl group and a substituted aryl group, and k is an integer selected from 2 to 6 where two ks may be the same or different from each other], the hydrogenated polybutadiene segment (B) hydroxyalkylated at both ends having a number average molecular weight of 500-10,000 and the ABA type block copolymer having a number average molecular weight of 10,000-500,000.

2. An ABA block copolymer according to Claim 1, wherein B' is a hydrogenated polybutadiene containing 80-95 mol.% of 1,2-bonds and 5-20 mol.% of 1,4-bonds.

3. A polyacetal resin composition, which comprises 100 parts by weight of a polymer compound (I) comprising 20-100 wt.% of the ABA type block copolymer according to Claim 1 or 2 and 0-80 wt.% of a polyacetal copolymer having a number average molecular weight of 10,000-500,000, represented by the following formula (4):



(4)

(where R^3 and R^4 are independently selected from the group consisting of hydrogen, an alkyl group, a substituted alkyl group, an aryl group and a substituted aryl group, p = 95 - 99.9 mol.%, q = 0.1 - 5 mol.%, p + q = 100 mol.%, and z is an integer selected from 2 to 6), and 0.1 to 200 parts by weight of at least one of polymer compounds (II) having a number average molecular weight of 500 or more, selected from the group consisting of a polyolefin-based polymer compound, a polyurethane-based polymer compound, a polyester-based polymer compound, a polystyrene-based polymer compound, a polyacryl-based polymer compound and a polyamide-based polymer compound.

4. A polyacetal resin composition according to Claim 3, wherein the polymer compound (II) is a polyolefin-based polymer compound comprising α-olefin-based polymer compound.

5. A polyacetal resin composition according to Claim 4, wherein the α-olefin-based polymer compound comprises 0.1 to 6 parts by weight of an ethylene-α-olefin random copolymer having a number average molecular weight of 500-10,000, comprising 10-70 mol.% of ethylene units and 30-90 mol.% of α-olefin units.

6. A polyacetal resin composition according to Claim 4, wherein the α-olefin-based polymer compound is an α-olefin-based copolymer modified by an unsaturated carboxylic acid or its acid anhydride.

7. A polyacetal resin composition according to

Claim 3, wherein the polymer compound (II) is a polystyrene-based polymer compound comprising a copolymer of an aromatic vinyl monomer and a copolymerizable unsaturated monomer that can be copolymerized with the aromatic vinyl monomer.

8. A polyacetal resin composition according to Claim 3, wherein the polymer compound (II) is a polystyrene-based polymer compound comprising a block (a) comprising a styrene monomer and a block (b) comprising isoprene or isoprene-butadiene and containing 20 mol.% or more of vinyl bonds.

9. A polyacetal resin composition, which comprises 100 parts by weight of a polymer compound (I) and 0.1 to 100 parts by weight of an inorganic filler.

10. A polyacetal resin composition, which comprises 100 parts by weight of polymer compound (I), 1 to 20 parts by weight of polymer compound (II) and 0.1 to 100 parts by weight of an inorganic filler.

11. A polyacetal resin composition, which comprises a polyacetal resin composition according to any one of Claims 3 to 10, and 0.01 to 0.2 parts by weight of at least two of difatty acid calciums having 12-22 carbon atoms and/or 0.01 to 0.9 parts by weight of at least two of esters of a fatty acid having 12-22 carbon atoms with ethylene glycol.

12. A molding comprising an ABA type block copolymer according to Claims 1 or 2, or a resin composition according to any one of Claims 3 to 11.

13. A molding according to Claim 12, wherein the molding is a large-diameter gear having a pitch circle diameter of 60 mm or more.

14. A molding according to Claim 12, wherein the molding is a large-diameter gear having a pitch circle diameter of 100 mm or more.